TECHNICAL REVIEW DOCUMENT for OPERATING PERMIT 020PME242

to be issued to:

ABC Industries, Inc. Mesa County Source ID 0770128

Prepared by Cathy Rhodes February, 2002

I. PURPOSE:

This document establishes the basis for decisions made regarding the Applicable Requirements, Emission Factors, Monitoring Plan and Compliance Status of Emission Units covered within the Operating Permit proposed for this site. It is designed for reference during review of the proposed permit by the EPA and during Public Comment. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Conclusions in this document are based on information provided in the original application submittal of January 2, 2002 and supplemental Title V technical information.

Any revisions made to the underlying construction permits associated with this facility in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised Construction Permit.

II. Source Description:

This facility manufactures fiberglass reinforced mine ventilation products. The facility is located at 610 South 12th Street in Grand Junction. Utah is an affected state within 50 miles of the facility. Black Canyon of the Gunnison is a Federal Class I designated area within 100 kilometers of the plant. In addition, Colorado National Monument and those portions of Black Canyon of the Gunnison not included as National Wilderness Area are Federal lands within 100 kilometers of the facility. These areas have been designated by the State to have the same sulfur dioxide increment as Federal Class I areas.

Facility wide emissions are as follows (tons/year):

Pollutant	<u>Actual</u>	<u>Potential</u>
Volatile Organic Compounds (VOC) Total HAPs	39 38	59 57
Individual HAPs:		
Styrene	4	6
Methyl Methacrylate	34	51

Actual emissions data are based on the year 2000. Potential emissions are based on permitted emission limits.

This facility is subject to Title V operating permit requirements because potential HAP emissions are greater than major source limits.

Prevention of Significant Deterioration

The area in which the plant operates is designated as attainment for all pollutants.

This facility is a synthetic minor source for Prevention of Significant Deterioration (PSD) purposes.

III. EMISSION SOURCES:

SUMMARY DESCRIPTION OF PROCESS

Initial Approval Construction Permit 90ME423 was issued for this facility. The following sources are specifically regulated under terms and conditions of the Operating Permit.

Two (2) Shop-Made Filament-Winding Machines

Resin is applied to a continuous strand of glass roving, a rope-like bundle made from fine glass filaments. The glass roving is passed through a dip tank containing liquid resin. The resin in the dip tank wets the glass, and then the wet roving is tightly wound around a rotating mold, called a mandrel. Filament winding is normally used to make cylindrical fiberglass reinforced parts, such as storage tanks, reaction vessels, duct work, process stacks and piping. VOCs are emitted from fresh resin during the fabrication process. Emissions from the polyester resin/fiberglass fabrication process occur when the cross-linking agent contained in the liquid resin evaporates into the air during resin application and curing. Styrene and methyl methacrylate are two of the principal monomers used as cross-linking agents.

Applicable requirements are as follows.

Construction Permit 90ME423

- Limits VOC, and HAP (total HAP emissions as well as specifically styrene and methyl methacrylate) emissions on a rolling twelve month basis
- Limits opacity (Regulation No. 1, II.A.1 & 4) (Note: The nature of the process does not result in opacity emissions, therefore this opacity limit is not included in the operating permit)
- Requires records of consumption rate on a monthly basis and criteria and hazardous air pollutants emission rates. (Note: The Construction Permit requires the permitee to retain records for three years. The operating permit requires record retention for five years in accordance with Operating Permit regulations.)

Emission Factors – VOC and HAP emissions are estimated using mass balance of material consumption and Unified Emission Factors for Open Molding Composites, published by the Composite Fabricators.

Monitoring – Actual monthly material consumption is used to estimate monthly and rolling twelve month total emissions, for comparison to emission limits.

V. Emission Factors

From time to time published emission factors and/or other emission estimating methods are changed based on new or improved data. A logical concern is what happens if the use of the new emission factors/methods in a calculation results in a source being out of compliance with a permit limit. For this operating permit, the emission factors, equations, and/or other emission estimating methods included in the permit are considered to be fixed until changed by the permit. Obviously, emission factors dependent on the fuel sulfur content or heat content of the fuel can not be fixed and will vary with the test results. The method for determining the emission factors is, however, fixed. It is the responsibility of the permittee to be aware of changes in the emission factors, etc. and to notify the Division in writing of impacts on the permit requirements when there is a change. Upon notification, the Division will work with the permittee to address the situation. In addition, the Division will review the factors, etc. as appropriate during permit modifications and renewals.

VI. Maximum Achievable Control Technology (MACT)

The EPA is in progress of establishing a MACT standard for fiberglass/reinforced plastic processes. The National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production was proposed on August 2, 2001. The EPA was scheduled to promulgate a MACT standard for this category by November 15, 2000. On May 15, 2002, the standard will be 18 months past due and subject to the case-by-case MACT determination requirements of 112(j) of the Clean Air Act Amendments of 1990. The permittee is required to submit "Part 1" application information by May 15, 2002. A "Part 2" application to incorporate the case-by-case

MACT determination into the operating permit is due 24 months after the Part 1 application is submitted, or such other date the EPA establishes through a rulemaking action.

VII. Accidental Release Program – 112(r)

Section 112(r) of the Clean Air Act mandates a new federal focus on the prevention of chemical accidents. Sources subject to these provisions must develop and implement risk management programs that include hazard assessment, a prevention program, and an emergency response program. They must prepare and implement a Risk Management Plan (RMP) as specified in the Rule.

The Title V application reports the facility is not subject to the Accidental Release Plan provisions of 112(r)(7) of the Clean Air Act.

VIII. Compliance Assurance Monitoring (CAM)

The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64 as adopted by reference into Colorado Regulation No. 3, Part C, Section XIV:

None